



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

NOV 17 2017

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

7011 0470 0002 9198 0302

Mr. Stuart Miyagishima
Vice President of Engineering
Advanced Flow Engineering, Inc.
232 Granite Street
Corona, California 92879

Re: Notice of Violation of the Clean Air Act

Dear Mr. Miyagishima:

The United States Environmental Protection Agency (EPA) has investigated and continues to investigate Advanced Flow Engineering, Inc. (aFe) for compliance with the Clean Air Act (CAA), 42 U.S.C. §§ 7401-7671q, and its implementing regulations. As detailed in this Notice of Violation (NOV), the EPA has determined that aFe sold parts or components for motor vehicle engines that bypass, defeat, or render inoperative devices or elements of design of motor vehicles that were installed by the original equipment manufacturer to enable the motor vehicles to comply with the CAA emission standards. EPA has also determined that aFe knew, or should have known, that these parts or components were offered for sale or installed for such use or put to such use. Therefore, aFe violated Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

Law Governing Alleged Violations

This NOV arises under Part A of Title II of the CAA, 42 U.S.C. §§ 7521-7554, and the regulations promulgated thereunder. These laws were enacted to reduce air pollution from mobile sources of air pollution. In creating the CAA, Congress found, in part, that "the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare."¹ Congress' purpose in creating the CAA, in part, was "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," and "to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution."²

EPA's allegations here concern parts or components for motor vehicles and motor vehicle engines for which EPA has promulgated emission standards: light-duty vehicles, light-duty trucks, medium-duty

¹ CAA § 101(a)(2), 42 U.S.C. § 7401(a)(2).

² CAA § 101(b)(1)-(2)), 42 U.S.C. § 7401(b)(1)-(2).

passenger vehicles, heavy-duty vehicles, and heavy-duty diesel vehicles, and heavy-duty engines.³ The CAA requires EPA to prescribe and revise, by regulation, standards applicable to the emission of any air pollutant from new motor vehicles or new motor vehicle engines that cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.⁴ As required by the CAA, the emission standards “reflect the greatest degree of emission reduction achievable through the application of [available] technology.”⁵ There are specific emission standards for each of these motor vehicles and engines for each pollutant and year of manufacture.⁶

The CAA defines a “motor vehicle” as “any self-propelled vehicle designed for transporting persons or property on a street or highway.” Section 216(2) of the CAA, 42 U.S.C. § 7550(2). In addition, the exclusion and exemption of motor vehicles and motor vehicle engines regulations clarify that

[f]or the purpose of determining the applicability of Section 216(2) of the CAA, a vehicle which is self-propelled and capable of transporting a person or persons or any material or any permanently or temporarily affixed apparatus shall be deemed a motor vehicle, unless any one of more of the criteria set forth below are met, in which case the vehicle shall be deemed not a motor vehicle: (1) The vehicle cannot exceed a maximum speed of 25 miles per hour over level, paved surfaces; or (2) The vehicle lacks features customarily associated with safe and practical street or highway use, ... ; or (3) The vehicle exhibits features which render its use on a street or highway unsafe, impractical, or highly unlikely. . . . 40 C.F.R. § 85.1703.

The CAA states it is a violation

for any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.

CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B); 40 C.F.R. § 86.1854-12(a)(3)(ii). It is also a violation to cause any of the foregoing acts. CAA § 203(a), 42 U.S.C. § 7522(a); 40 C.F.R. § 86-1854-12(a).

The CAA and the applicable regulations also prohibit any person from failing or refusing to make reports or provide information required under section 208 of the CAA, 42 U.S.C. § 7542. CAA § 203(a)(2), 42 U.S.C. § 7522(a)(2); 40 C.F.R. § 86.1854-12(a)(2)(i).

³ See generally 40 C.F.R. Part 86, Subpart A (setting emission standards for these categories).

⁴ CAA §§ 202(a)(1) and (3)(B), 42 U.S.C. §§ 7521(a)(1) and (3)(B).

⁵ CAA § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i).

⁶ See, e.g., heavy-duty diesel engine emission standards at 40 C.F.R. §§ 86.004-11, 86.007-11, 86.099-11 and light-duty vehicle emission standards at 40 C.F.R. § 86.1811-04. See also 40 C.F.R. § 86.090-8 (1990 and later model year light-duty vehicles); 86.094-9 (1994 and later model year light-duty truck); 86.001-9 (2001 and later model year light duty trucks); 86.004-9 (2004 and later model year light-duty truck); 86.091-10 (1991 and later model year Otto-cycle heavy duty engines and vehicles); 86.008-10 (2008 and later model year Otto-cycle heavy-duty engines and vehicles).

Finally, the CAA provides that persons subject to the requirements of the CAA, and the applicable regulations, shall establish and maintain records, and provide information, which EPA may require to determine whether the person has acted, or is acting, in compliance with the CAA and its regulations. CAA § 208(a), 42 U.S.C. § 7542(a).

EPA Certification Program

EPA administers a certification program to ensure that every vehicle introduced into United States (U.S.) commerce satisfies applicable emission standards. Under this program, EPA issues certificates of conformity (COCs), and thereby approves the introduction of motor vehicles into U.S. commerce. To obtain a COC, a motor vehicle manufacturer must submit a COC application to the EPA for each test group of vehicles that it intends to enter into U.S. commerce.⁷

Motor vehicle manufacturers employ many devices and elements of design to meet emission standards to obtain COCs. “Element of design” means “any control system (*i.e.*, computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.”⁸ For example, manufacturers employ certain hardware devices as emission control systems to manage and treat exhaust to reduce levels of regulated pollutants from being created or emitted into the ambient air. For diesel-fueled motor vehicles, these devices include diesel particulate filters, exhaust gas recirculation, and selective catalytic reduction. For gasoline-fueled vehicles, these devices include exhaust gas recirculation and use of a catalytic converter.

Factual Background

aFe advertises and offers for sale online certain parts or components for use on highway vehicles that are manufactured by the following, but not limited to, General Motors Company (GM), Ford Motor Company (Ford), Nissan Motor Corporation (Nissan), Dodge [trade name owned by Fiat Chrysler Automobiles] (Dodge), Chevrolet [trade name owned by Fiat Chrysler Automobiles] (Chevy), Toyota, Motor Company (Toyota), Bayerische Motoren Werke AG (BMW), Honda Motor Co., Ltd. (Honda), 2Polaris Industries Inc. (Polaris), Suzuki Motor Corporation (Suzuki), Jeep [trade name owned by Fiat Chrysler Automobiles] (Jeep), and Yamaha Motor Corporation (Yamaha), which bypass, defeat, or render inoperative a device or element of design that is used to control emissions on the motor vehicle. The parts and components that are the subject matter of this NOV are exhaust systems that are used to eliminate the catalytic converter, diesel particulate filter (DPF) and/or exhaust gas recirculation (EGR). The catalytic converter is a primary emission control component that is used to reduce toxic byproducts of burning fuel (*e.g.*, nitrogen oxides, carbon monoxide, and hydrocarbons) to less hazardous byproducts such as carbon dioxide, water vapor, and nitrogen gas. The DPF is a filter that removes soot and diesel particulate matter from the exhaust gas in an effort to reduce particulate matter. The EGR system works by recirculating a portion of an engine’s exhaust gas back to the engine cylinders in an effort to reduce emissions of nitrogen oxides.

⁷ See 40 C.F.R. §§ 86.004-21 and 86.1844-01. Motor vehicles can be certified in a motor vehicle test group or engine family. For simplicity, for the remainder of this NOV, EPA will use the nomenclature “motor vehicles” to refer to both motor vehicles and motor vehicle engines.

⁸ 40 C.F.R. § 86.1803-01. See also 40 C.F.R. § 86.094-2.

On August 10, 2016, pursuant to Section 208 of the CAA, EPA issued to aFe an Information Request concerning, among other things, the hardware, software, and exhaust parts and components that aFe offered for sale or sold since January 1, 2014.

aFe responded to the Information Request on October 4, 2016 and November 17, 2016. aFe's responses to the Information Request revealed the following:

1. As described in the enclosed Table, between January 1, 2014, and October 4, 2016, aFe offered for sale and sold 31,152 exhaust systems in violation of the CAA. These exhaust systems are used to bypass, defeat, or render inoperative the catalytic converter, diesel particulate filter and/or exhaust gas recirculation on certain highway vehicles (the Subject Exhaust Systems).
2. aFe manufactures, advertises, and sells the Subject Exhaust Systems for use on 1994 to current model year GM, Ford, Nissan, Dodge, Chevy, Toyota, BMW, Honda, Polaris, Suzuki, Jeep, and Yamaha highway vehicles.

Alleged Defeat Device Violations

The Subject Exhaust Systems function as defeat devices by replacing and therefore rendering inoperative the motor vehicle's original exhaust system which included a catalyst to control emissions. The Subject Exhaust Systems include instruction manuals instructing user to remove the original equipment manufacturer (OEM) exhaust system which included a catalyst, diesel particulate filter and/or exhaust gas recirculation and replace it/them with a Subject Exhaust System which does not retain an OEM catalyst, diesel particulate filter and/or exhaust gas recirculation. For example, aFe provides the following installation instructions for the following components and parts:

- "20. Remove the EGR cooler." (Ford Super Duty 2003-2007 V8-6.0L (td) EGR Track Kit 46-90076)
- "Step 3: Removal of your factory turbo down pipe and catalytic converter." (GM Silverado HD/Sierra HD 2011-2016 V8-6.6L DP-Back 49-44044-P and 49-44044-B)
- "Remove your stock exhaust from the rear of your truck working your way forward." (Dodge Cummins 2003-2004 L6-5.9L Diesel Exhaust 49-42003)
- "Step 3: Remove diesel particulate filter (DPF)....Step 4: Remove Catalytic Converter, begin with supporting with jack/stands." (Dodge RAM 2500/3500 2013-2016 I6-6.7L 4" Race Pipe 49-42055 and 49-02055)
- "Step 9: Remove catalytic converter" (BMW 335i (F30) / 435i (F32) / M235i (F22) 2012-2014 L6-3.0L (t) N55 Down-Pipe 48-36311)
- "Step 3: ... You can now remove your exhaust.." (GM Silverado HD & Sierra HD 2011-201 V8-6.6L (td) DPF-Delete 49-44029-B and 49-44029-P)

The installation instructions for Subject Exhaust Systems do not direct users to reinstall the catalytic converter, diesel particulate filter and/or exhaust gas recirculation.

Due to the design and purpose of the Subject Exhaust Systems as shown by aFe's website, advertisements, and disclaimer, aFe knew, or should have known, that the Subject Exhaust Systems were offered for sale or sold in order to bypass, defeat, or render inoperative devices or elements of design that control emissions of regulated air pollutants. For example, on its website under Frequently Asked Questions, aFe states the following:

The California Air Resources Board, also known as CARB or ARB, is the "clean air agency" in the government of California.

Exempted parts are add-on or modified parts that have undergone an ARB engineering evaluation. If the part or modification is shown to not increase vehicle emissions, it is granted an exemption to emission control system anti-tampering laws. This exemption is called an Executive Order (EO) and allows the modification to be installed on specific emission controlled vehicles. Every Executive Order part or modification has an assigned number that can be verified by Smog Check stations, BAR Referee stations, or by the ARB.

It appears that aFe advertises products most or all of which are installed on vehicles used on the street. The sheer volume of the Subject Exhaust Systems (over 31,000) belies any claim that all of the Systems are used solely for competition. One example of a street use reference on the aFe website is for street use of the EGR cooler delete system intended for use on 2010-2012 6.7L Dodge Diesel trucks:

aFe Power is proud to introduce the new EGR cooler delete system for 2010-2012 6.7L Dodge diesel. Constructed out of durable CRS for maximum strength and finished with a black zinc coating, this kit will allow the removal of the crossover tube and EGR cooler. This is a "must have" when upgrading to a larger turbocharger or using a "Race Only" intake manifold that will require the removal of the EGR Valve.

This is a representation of this product being employed for both street use and race use. Although disclaimers and other terminology used on the aFe website also state racing applications, it appears that aFe products are employed for street use or both street use and race use.

Another example of a street use reference on the aFe website is for street use of aFe exhaust intended for use on 1999-2003 Ford Power Stroke V8- 7.3L. The review from customer James C, posted on July 8, 2016, states:

I Have This On My 99' F-350 Lariat 4 X 4 Crew Cab Long Bed Truck With The 7.3 Diesel Powerstroke Engine,I Bought The Whole Package Cold Air Intake And Exhaust System With The 4" And It Sounds Great And It Has A Nice Flowing Sound, Has A Nice Rumble Deep And Throaty Sound. I Get Alot Of Thumbs Ups From Passers By And Going Down City Streets At 30 Mph. It Just Roars Its A Must Buy No Need To Look Any Futher You Will Not Find A Better Product Nor A Better Price So Stop Looking And Get This Exhaust System You Won'T Be Disappointed, I Promise, You Will Like What You Hear And See,Leting Youre Truck Have A Nice Exhaust Flow With Out No Restrictions.

Phrases indicating "going down city streets at 30 Mph" is a representation of street use.

Another example of a street use reference is on aFe Power's YouTube channel where there is a video entitled, "2008-2013 Infiniti G37 Coupe Performance Exhaust Sound Clip," showing a vehicle with Part Number 49-36103 being driven on the streets with commercial buildings and trucks in the background. This product video is a clear representation of this product being employed for street use.

The Subject Exhaust Systems function as a defeat device by bypassing, defeating, or rendering inoperative the motor vehicle's catalytic converter. aFe knew, or should have known, that the Subject Exhaust Systems were offered for sale, sold, or installed in order to bypass, defeat, or render inoperative devices or elements of design that control emissions of regulated air pollutants. The EPA has maintained since the CAA amendments of 1990 that "any pipe used to replace the section of exhaust where the catalytic converter should be, would be considered illegal under the Clean Air Act." EPA's *Exhaust System Repair Guidelines*, March 13, 1991. aFe's sale or distribution of the 31,152 Subject Exhaust Systems between January 1, 2014, and October 4, 2016 constitutes 31,152 separate violations of section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

Enforcement Authority

EPA may bring an enforcement action for these violations under its administrative authority or by referring this matter to the United States Department of Justice with a recommendation that a civil complaint be filed in federal district court. CAA §§ 204 and 205, 42 U.S.C. §§ 7523 and 7524. Persons violating Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), are subject to an injunction under section 204 of the CAA, 42 U.S.C. § 7523, and a civil penalty of up to \$3,750 for each violation occurring after December 6, 2013 through November 2, 2015, and \$4,527 for each violation occurring after November 2, 2015. CAA § 205(a), 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4.

The EPA contact in this matter is Roshni Brahmbhatt. You may call Ms. Brahmbhatt at 415-972-3995 or contact him by email at Brahmbhatt.Roshni@epa.gov to request a conference. You should make your request for a conference no later than 10 calendar days after you receive this letter, and we would hold any conference you request within a reasonable time thereafter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathleen H. Johnson".

Kathleen H. Johnson, Director
Enforcement Division

Enclosures: Table

TABLE

TABLE: Advanced Flow Engineering violations of CAA Section 203 for the period 2014-2016 for offering sale of or sale of 31,152 Subject Exhaust Systems			
#	Component Number	Component Name	Total Quantity Sold
1	46-90071	MAN EGR Cooler Delete Dodge Dsl Trucks 07.5-09 L6	280
2	46-90072	MAN EGR Cooler Delete Dodge Dsl Trucks 10-12 L6	613
3	46-90076	EGR Track Kit Ford Dsl Trucks 03-07 V8-6.0L	643
4	49-03004	EXH 4 in DP-Back Ford Dsl Trucks 08-10 V8-6.4L	754
5	49-03004NM	EXH 4 in DP-Back Ford Dsl Trucks 08-10 V8-6.4L	797
6	49-03006	EXH 4 in DP-Back Ford Dsl Trucks 11-16 V8-6.7L	531
7	49-03006NM	EXH 4 in DP-Back Ford Dsl Trucks 11-16 V8-6.7L	466
8	49-03039NM	EXH 5 in DP-Back Ford Dsl Trucks 11-16 V8-6.7L	737
9	49-03040NM	EXH 5in DP-Bk Ford Dsl Trk 08-10 6.4L wo mflr/tip	300
10	49-03066-P	EXH 4in DP-Bk Ford Dsl Trk 11-16 V8-6.7L pol tips	27
11	49-04001	EXH 4 in DP-Back GM Dsl Trucks 01-07 V8-6.6L	129
12	49-04001NM	EXH 4 in DP-Back GM Dsl Trucks 01-07 V8-6.6L	176
13	49-04002	EXH 4 in DP-Back GM Dsl Trucks 07.5-10 V8-6.6L	586
14	49-04002NM	EXH 4 in DP-Back GM Dsl Trucks 07.5-10 V8-6.6L	639
15	49-04003	EXH 4 in DP-Back GM Dsl Trucks 11-15 V8-6.6L	887
16	49-04003NM	EXH 4 in DP-Back GM Dsl Trucks 11-15 V8-6.6L	839
17	49-04007NM	EXH 5 in DP-Back GM Dsl Trucks 01-07 V8-6.6L	181
18	49-04033NM	EXH 5 in DP-Back GM Dsl Trucks 07.5-10 V8-6.6L	298
19	49-04035NM	EXH 5in DP-Bk GM Dsl Trk 11-15 6.6L wo mflr no tip	405

20	49-04044-B	EXH 4 in DP-Back GM Dsl Trucks LML 11-15 V8-6.6L	18
21	49-04044-P	EXH 4 in DP-Back GM Dsl Trucks LML 11-15 V8-6.6L	26
22	49-04045-B	EXH 4in DP-Bk GM Dsl Trk 01-07 V8-6.6 blk-dual	7
23	49-04045-P	EXH 4in DP-Bk GM Dsl Trk 01-07 V8-6.6 pol-dual	11
24	49-04052	EXH 4in DP-Bk GM Dsl Truck 15.5-16 6.6L dual	13
25	49-04053	EXH 4 in DP-Back GM Dsl Trk 15.5-16 6.6L no tip	160
26	49-04054NM	EXH 5 in DP-Back GM Dsl Trk 15.5-16 V8-6.6L	106
27	49-04059	EXH 4 in DP-Back GM Dsl Trk 01-10 V8-6.6L no tip	60
28	49-04059NM	EXH 4 in DP-Back GM Dsl Trk 01-10 V8-6.6L wo mflr	108
29	49-04060NM	EXH 5 in DP-Back GM Dsl Trk 01-10 V8-6.6L wo mflr	25
30	49-13022	EXH 4in DP-BkFord Dsl Truck 08-10 V8-6.4L w/bungs	141
31	49-13029	EXH 4in DP-BkFord Dsl Truck 08-10 V8-6.4Lno bungs	74
32	49-14003	EXH 4 in DP-Back GM Dsl Trucks 01-07 V8-6.6L	100
33	49-14003NM	EXH 4 in DP-Back GM Dsl Trucks 01-07 V8-6.6L	113
34	49-14017NM	EXH 4 in DP-Back GM Dsl Trucks 07.5-10 V8-6.6L	97
37	49-42021	EXH 4 in DP Dodge Dsl Trucks 07.5-12 L6-6.7L	57
38	49-42023	EXH 4 in DP Dodge Dsl Trucks 07.5-12 L6-6.7L	320
39	49-43022	EXH 4in DP-Bk Ford Dsl Truck 08-10 V8-6.4L w mflr	138
40	49-43023NM	EXH 4in DP-Bk Ford Dsl Truck 08-10 V8-6.4L wo mflr	39
41	49-43025	EXH 4 in DP Ford Dsl Trucks 08-10 V8-6.4L	285
42	49-43029	EXH 4in DP-BkFord Dsl Truck 08-10 V8-6.4L w mflr	43
43	49-43030NM	EXH 4in DP-Bk Ford Dsl Truck 08-10 V8-6.4L wo mflr	28

44	49-43034	EXH 4in DP-Bk Ford Dsl Truck 11-16 V8-6.7L w mflr	206
45	49-43035NM	EXH 4in DP-Bk Ford Dsl Truck 11-16 V8-6.7L wo mflr	56
46	49-43039	EXH 5 in DP-Back Ford Dsl Trucks 11-16 V8-6.7L	200
47	49-43039NM	EXH 5 in DP-Back Ford Dsl Trucks 11-16 V8-6.7L	324
48	49-43040	EXH 5 in DP-Back Ford Dsl Trucks 08-10 V8-6.4L	74
49	49-43040-B	EXH 5 in DP-Back Ford Dsl Trucks 08-10 V8-6.4L	54
50	49-43040-P	EXH 5 in DP-Back Ford Dsl Trucks 08-10 V8-6.4L	69
51	49-43066-B	EXH 4in DP-Bk Ford Dsl Trk 11-16 V8-6.7L blk tips	12
52	49-43066-P	EXH 4in DP-Bk Ford Dsl Trk 11-16 V8-6.7L pol tips	8
53	49-44003-B	EXH 4in DP-Bk GM Dsl Trucks 01-07 V8-6.6L blk tip	25
54	49-44003-P	EXH 4in DP-Bk GM Dsl Trucks 01-07 V8-6.6L pol tip	43
55	49-44007-B	EXH 5in DP-Bk GM Dsl Trucks 01-07 V8-6.6L blk tip	11
56	49-44007NM	EXH 5in DP-Bk GM Dsl Trucks 01-07 V8-6.6L no tip	51
57	49-44007-P	EXH 5in DP-Bk GM Dsl Trucks 01-07 V8-6.6L pol tip	17
58	49-44017-B	EXH 4 in DP-Bk GM Dsl Trk 07.5-10 V8-6.6L blk tip	54
59	49-44017-P	EXH 4 in DP-Bk GM Dsl Trk 07.5-10 V8-6.6L pol tip	201
60	49-44031NM	EXH 4in DP-Bk GM Dsl Trk 11-15 6.6L wo mflr no tip	68
61	49-44032	EXH 4in DP-Bk GM Dsl Trucks 11-15 6.6L w/mflr	320
62	49-44033-B	EXH 5 in DP-Bk GM Dsl Trk 07.5-10 V8-6.6L blk tip	37
63	49-44033NM	EXH 5 in DP-Bk GM Dsl Trk 07.5-10 V8-6.6L no tip	113
64	49-44033-P	EXH 5 in DP-Bk GM Dsl Trk 07.5-10 V8-6.6L pol tip	39
65	49-44035-B	EXH 5 in DP-Back GM Dsl Trk 11-15 V8-6.6L blk tip	94

66	49-44035NM	EXH 5in DP-Bk GM Dsl Trk 11-15 6.6L wo mflr no tip	143
67	49-44035-P	EXH 5 in DP-Back GM Dsl Trk 11-15 V8-6.6L pol tip	119
68	49-44044-B	EXH 4in DP-Bk GM Dsl Trk 11-15 V8-6.6 blk-dual	28
69	49-44044-P	EXH 4in DP-Bk GM Dsl Trk 11-15 V8-6.6 pol-dual	40
70	49-44045-B	EXH 4in DP-Bk GM Dsl Trk 01-07 V8-6.6 blk-dual	10
71	49-44045-P	EXH 4in DP-Bk GM Dsl Trk 01-07 V8-6.6 pol-dual	6
72	49-44052-B	EXH 4in DP-Bk GM Dsl Truck 15.5-16 6.6L blk-dual	18
73	49-44052-P	EXH 4in DP-Bk GM Dsl Truck 15.5-16 6.6L pol-dual	19
74	49-44053-B	EXH 4 in DP-Back GM Dsl Trk 15.5-16 6.6L blk tip	34
75	49-44053-P	EXH 4 in DP-Back GM Dsl Trk 15.5-16 6.6L pol tip	45
76	49-44054-B	EXH 5 in DP-Back GM Dsl Trk 15.5-16 6.6L blk tip	28
77	49-44054-P	EXH 5 in DP-Back GM Dsl Trk 15.5-16 6.6L pol tip	32
78	49-44059-B	EXH 4 in DP-Back GM Dsl Trk 01-10 V8-6.6L blk tip	5
79	49-44059-P	EXH 4 in DP-Back GM Dsl Trk 01-10 V8-6.6L pol tip	6
80	49-44060-B	EXH 5 in DP-Back GM Dsl Trk 01-10 V8-6.6L blk tip	3
81	49-44060-P	EXH 5 in DP-Back GM Dsl Trk 01-10 V8-6.6L pol tip	4
82	49-02001	EXH 4 in TB Dodge Dsl Trucks 94-02 L6-5.9L	97
83	49-02001NM	EXH 4 in TB Dodge Dsl Trucks 94-02 L6-5.9L	123
84	49-02002	EXH 4 in TB Dodge Dsl Trucks 03-04 L6-5.9L	100
85	49-02002NM	EXH 4 in TB Dodge Dsl Trucks 03-04 L6-5.9L	154
86	49-02003	EXH 4 in TB Dodge Dsl Trucks 04.5-09 L6-5.9L/6.7L	530
87	49-02003NM	EXH 4 in TB Dodge Dsl Truck 04.5-09 L6-5.9/6.7L	471

88	49-02005	EXH 4 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	1,062
89	49-02005NM	EXH 4 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	722
90	49-02007NM	EXH 5 in TB Dodge Dsl Trucks 04.5-07 L6-5.9L	102
91	49-02030NM	EXH 5 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	840
92	49-02032NM	EXH 5 in TB Dodge Dsl Trucks 03-04.5 L6-5.9L	189
93	49-02033NM	EXH 5 in TB Dodge Dsl Trucks 94-02 L6-5.9L	103
94	49-02047NM-1	EXH 5 in TB Dodge Dsl Trucks 13-16 L6-6.7L no tip	315
95	49-02054	EXH 4 in TB RAM Dsl Trucks 13-16 L6-6.7L	97
96	49-02054NM	EXH 4 in TB RAM Dsl Trucks 13-16 L6-6.7L	93
97	49-03002	EXH 4 in TB Ford Dsl Trucks 99-03 V8-7.3L	155
98	49-03002NM	EXH 4 in TB Ford Dsl Trucks 99-03 V8-7.3L	289
99	49-03003	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	258
100	49-03003NM	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	384
101	49-03075NM	EXH 5 in TB Ford Dsl Trucks 99-03 V8-7.3L	18
102	49-03077NM	EXH 5 in TB Ford Dsl Trucks 03-07 V8-6.0L	35
103	49-12001	EXH 4 in TB Dodge Dsl Trucks 94-02 L6-5.9L	40
104	49-12003	EXH 4 in TB Dodge Dsl Trucks 03-04 L6-5.9L	44
105	49-12004	EXH 4 in TB Dodge Dsl Trucks 04.5-07 L6-5.9L	83
106	49-12009-1	EXH 4 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	313
107	49-13002	EXH 4 in TB Ford Dsl Trucks 99-03 V8-7.3L	74
108	49-13004	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	77
109	49-13005	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	13

110	49-42001	EXH 4 in TB Dodge Dsl Trucks 94-02 L6-5.9L	26
111	49-42003	EXH 4 in TB Dodge Dsl Trucks 03-04 L6-5.9L	15
112	49-42004	EXH 4 in TB Dodge Dsl Trucks 04.5-07 L6-5.9L	82
113	49-42007	EXH 5 in TB Dodge Dsl Trucks 04.5-07 L6-5.9L	50
114	49-42009-1	EXH 4 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	304
115	49-42010NM-1	EXH 4 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	56
116	49-42030-P	EXH 5 in TB Dodge Dsl Trucks 07.5-12 L6-6.7L	578
117	49-42032-B	EXH 5in TB Dodge Dsl Trucks 03-04 L6-5.9L blk tip	14
118	49-42032-P	EXH 5in TB Dodge Dsl Trucks 03-04 L6-5.9L pol tip	24
119	49-42033-B	EXH 5in TB Dodge Dsl Trucks 94-02 L6-5.9L blk tip	14
120	49-42033NM	EXH 5in TB Dodge Dsl Trucks 94-02 L6-5.9L no tip	23
121	49-42033-P	EXH 5in TB Dodge Dsl Trucks 94-02 L6-5.9L pol tip	16
122	49-42047-1B	EXH 5in TB Dodge Dsl Trucks 13-16 L6-6.7L blk tip	94
123	49-42047-1P	EXH 5in TB Dodge Dsl Trucks 13-16 L6-6.7L pol tip	112
124	49-42054-B	EXH 4 in TB RAM Dsl Trucks 13-16 L6-6.7L blk tip	10
125	49-42054-P	EXH 4 in TB RAM Dsl Trucks 13-16 L6-6.7L pol tip	12
126	49-42055	EXH 4 in RP RAM Dsl Trucks 13-16 L6-6.7L	37
127	49-43002	EXH 4 in TB Ford Dsl Trucks 99-03 V8-7.3L	42
128	49-43004	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	109
129	49-43005	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L	31
130	49-43008	EXH 4 in TB Ford Excursion 00-03 V8-7.3L	26
131	49-43010	EXH 4 in TB Ford Excursion 03-05 V8-6.0L	24

132	49-43016	EXH 4 in TB Ford Dsl Trucks 03-07 V8-6.0L dual	7
133	49-43075-B	EXH 5 in TB Ford Dsl Trucks 99-03 V8-7.3L	1
134	49-43075-P	EXH 5 in TB Ford Dsl Trucks 99-03 V8-7.3L	2
135	49-43077-B	EXH 5 in TB Ford Dsl Trucks 03-07 V8-6.0L	6
136	49-43077-P	EXH 5 in TB Ford Dsl Trucks 03-07 V8-6.0L	4
137	49-02009	EXH 4 in DP Dodge Dsl Trucks 07.5-12 L6-6.7L	84
138	49-02010	EXH 4 in RP Dodge Dsl Trucks 07.5-12 L6-6.7L	788
139	49-02011	EXH 4 in DP Dodge Dsl Trucks 07.5-12 L6-6.7L	345
140	49-02050	EXH 4 in RP RAM Dsl Trucks 13-16 L6-6.7L	173
141	49-02055	EXH 4 in RP RAM Dsl Trucks 13-16 L6-6.7L	49
142	49-03010	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	1,192
143	49-03011	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	141
144	49-03012	EXH 4 in RP Ford Dsl Trucks 11-16 V8-6.7L	819
145	49-04010	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	111
146	49-04011	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	78
147	49-04012	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	28
148	49-04013	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L LMM ECLB	21
149	49-04014	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	280
150	49-04015	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	86
151	49-04021	EXH 4 in RP GM Dsl Trucks 11-15 V8-6.6L	100
152	49-04022	EXH 4 in RP GM Dsl Trucks 11-16 V8-6.6L	376
153	49-04055	EXH 4 in RP GM Dsl Trucks 15.5-16 V8-6.6L	3

154	49-04066	EXH 4 in RP GM Dsl Trucks 11-15 V8-6.6L	37
155	49-04067	EXH 4 in RP GM Dsl Trucks 15.5-16 V8-6.6L	31
156	49-36319	EXH 2.5 in RP BMW 328i (E92/E93) 07-13 L6-3.0L	39
157	49-42020	EXH 4 in RP Dodge Dsl Trucks 07.5-12 L6-6.7L	212
158	49-42022	EXH 4 in RP Dodge Dsl Trucks 07.5-12 L6-6.7L	118
159	49-42029	EXH 4 in RP Dodge Dsl Trucks 11-12 L6-6.7L	26
160	49-42050	EXH 4 in RP RAM Dsl Trucks 13-16 L6-6.7L	64
161	49-43024	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	652
162	49-43026	EXH 3.5 in RP Ford Dsl Trucks 08-10 V8-6.4L	150
163	49-43027	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	624
164	49-43031	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	558
165	49-43032	EXH 4 in RP Ford Dsl Trucks 08-10 V8-6.4L	13
166	49-43036	EXH 4 in RP Ford Dsl Trucks 11-16 V8-6.7L	729
167	49-44019	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	166
168	49-44020	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	37
169	49-44021	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	106
170	49-44022	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	36
171	49-44023	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	32
172	49-44024	EXH 4 in RP GM Dsl Trucks 07.5-10 V8-6.6L	16
173	49-44027	EXH 4 in RP GM Dsl Trucks 11-16 V8-6.6L mid-pipe	128
174	49-44028	EXH 4 in RP GM Dsl Trucks 11-15 V8-6.6L frnt-pipe	59
175	49-44055	EXH 4 in RP GM Dsl Trucks 15.5-16 V8-6.6L	6

176	49-44066	EXH 4 in RP GM Dsl Trucks 11-15 V8-6.6L	20
177	49-44067	EXH 4 in RP GM Dsl Trucks 15.5-16 V8-6.6L	24
178	48-33017-HN	HDR DP Ford Mustang 15-16 I4-2.3L (t) Race	3
180	48-36005-HN	HDR Scion FR-S/BRZ 13-16 H4-2.0L Race	4
181	48-36301-1	HDR DP BMW 335i 07-10 L6-3.0L (tt) N54 Race	70
182	48-36302-HN	HDR DP BMW 335i(E9X) 11-13 L6-3.0L (t) N55 Race	5
183	48-36311	HDR DP BMW 335i (F30) 12-13 3.0L (t) N55 Race	27
184	48-36313	HDR DP BMW M3/M4 15-16 L6-3.0L (tt) Race	8
185	48-36602-HN	HDR DP Honda Civic Si 12-15 L4-2.4L Race	2
187	48-46303-HN	HDR DP BMW 328/428i (F30/32) 12-16 2.0L (t) Race	55
188	49-44025	EXH 4 in CB GM Dsl Trucks 11-16 V8-6.6L	11
189	49-44026NM	EXH 4in CB GM Dsl Truck 11-16 6.6L wo mflr no tip	4
190	49-44029-B	EXH 5in CB GM Dsl Trucks 11-16 6.6L w/mflr blk tip	7
191	49-44029-P	EXH 5in CB GM Dsl Trucks 11-16 6.6L w/mflr pol tip	15
192	49-44030NM	EXH 5in CB GM Dsl Trucks 11-16 6.6L wo mflr no tip	11
		Total	31,152